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World University Rankings: On the New Arts of Governing (Quality)

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1. Introduction

As Ellen Hazelkorn remarks in the opening paragraph of her book *Rankings and the Reshaping of Higher Education* (2011: 1); "…the first global ranking of universities was developed in 2003 by the Shanghai Jiao Tong University – and the rest, as they say, is history". Yet this was no ordinary unravelling of history in the higher education world. Within months of the launch of the Shanghai Jiao Tong *Academic Ranking of World Universities* (ARWU) in 2003, a major European meeting was told that Europe was not just behind the US, but also other economies around the world. With only 10 European universities amongst the top-ranked 50 (the highest of them in the UK) compared with 35 universities for the United States, Europe's policymakers released a rush of institutional pronouncements on the need to reform Europe's higher education systems.

A year later, 2004, the Times Higher Education (THE) and Quacquarelli Symonds (QS) World University Rankings (THE-QS) were launched, to be followed by a spectacular rift between the two partners in 2009. Styling itself as "…the global authority on higher education performance" (Times Higher Education website), the Times Higher Education (THE) launched a reinvention of itself as a global university ranking expert. Now partnered and powered by Thompson-Reuters, Canada's leading corporate brand specialising in information for professionals and businesses around the globe, the THE World University Rankings publishes both general global and specialist regional and subject rankings. Not only do rankings sell copy in an ailing newspaper industry, but it provides firms such as the TH and Thompson Reuters with a potential entry-point into the higher education quality assessment regime through its rapidly accumulating knowledge on university profiles, citations, impact factors and reputation assessments. By early 2010, the European Commission had also announced its own challenge to the global rankings game with U-Multirank; a European-driven ranking system which invited stakeholders to participate in a system that might recognise the strengths of most of the European universities who had, until now, been eclipsed by private US universities.

We could be forgiven for thinking that the dawn of this new higher education history began with the innocent enough launch of the Shanghai Jiao Tong in 2003. Yet, despite the commotion caused by the entry of these more recent ranking tools, HE rankings are not entirely a new phenomenon. Since the 1980, following the rolling out of neo-liberalism as a reorganising project (Harvey, 2005), the idea that higher education students were consumers, and that their (consumer) choices depended on information about the quality of an institution, resulted in a rapidly growing industry of publications selling of 'best buys'. This industry—made up of newspapers and dedicated organisations—begun to publish guides as to the best universities and colleges – from the *Good Universities Guide* (Australia) to the *Bertelsmann Stiftung* in Germany. Yet these were largely national in their orientation, even if their intended audiences were global choosers.

The emergence of global rankings has provided a new round of 'ammunition' to advance other kinds of quite diverse projects: these include triggering university mergers in order to meet some of the size criteria that increases position in the hierarchy; as filters for skilled labour; as data to judge institutional financial risk; the stimulus to further advance the creation of a European Higher Education Area; prioritised funding for research in the areas of Science, Technology, Engineering and Mathematics; the list goes on. In short, rankings have unleashed a battle for brains, and lifted to even greater prominence and importance the role of the university in advancing globally-competitive knowledge-based economies. Driving this wave has been an explosion of fora attended by local, national and transnational policymakers, industry experts, analysts and researchers, all with their own agendas, interests and explanations. Since then, heated debates have raged around questions such as the use, relevance, reliability and significance of these technologies. It was, and continues to be heady and deadly serious stuff. Institutions have vetoed contributing data; others have worn their rankings triumphantly. Rankings also have opponents and proponents. Yet what is clear is that whatever one's own views, it is impossible to ignore them.

How are we to understand these developments? What do they tell us about higher education quality? And how have they managed to have the effects they do? In this paper we examine the different explanations which have emerged regarding the emergence and significance of global university rankings, and suggest that each of these competing

explanations invoke different understandings of 'quality'. Second, we show that university rankings are particular kinds of technologies of power in the arts of governing globally that require explanation beyond those currently invoked. Here we draw upon the work of Knorr-Cetina (2005) and as well as our work on global education policy and governance (Robertson, 2011; 2012) to suggest global university rankings have the effects they do because of their 'scopic' system like character, on the one hand, and because of the complex way in which 'competitive comparison' is deployed.

2.   'Waves', Political Projects, and 'Quality'

Why and how have league tables of world universities managed to become so popular across global space? Typical explanations of *how* practices that are developed in one place are able to extend out into global space tend to favour linear concepts, like 'policy borrowing' or 'policy transfer' (Steiner-Khamsi, 2003). However, such 'billiard ball' explanations fail to capture the non-linear and multi-layered trajectory of many of the disruptive social forces associated with globalisation. We prefer Walby's (2003; 2009) concept of 'wave' - as a means of capturing the simultaneous temporal, spatial and non-linear and transformative dimensions of social change - so that a critical event in one location can have repercussions on social formations elsewhere. It starts in specific spatial location, builds rapidly through endogenous processes, and then spreads out though space and time to affect social relations in other locations.

These global waves carry new social and political projects. They also entail new or re-worked visions of the social order. These events are connected, but not rigidly, passing through networks and social institutions. Waves can contain relatively small, specific projects, or they can articulate large projects of societalisation, such as neo-liberal informed restructuring of whole societies (c.f., Dezalay and Garth, 2002), or the major reorganisation of public sectors (as in the case of New Public Management – Hood, 1991). The former may be more easily absorbed or hybridised; the latter are more likely to provoke resistance or backlash. The former may merely speed a process of development already begun by some social forces, and its ideas championed within that social formation. Alternatively, waves

may challenge the foundations of the social order, bearing projects that imply societalisation around different principles, such as the creation of a knowledge-based economy and society. What gives the wave momentum, reach, and penetration, as a social force and social process (or what Walby (2003: 15) calls 'social energy') is the nature of the external circumstances, the connectedness of its networks, the resources available to participants (such as promotional and explanatory discourses) and the energy generated. We'll also be suggesting later, however, that *reach* is also enabled by rankings acting like 'scopic systems' (Knorr-Cetina, 2005) whose flows are micro-structured through the active effects of competitive comparison. Taken together these enable a project (or ensemble of projects) to pass through, disturb, and potentially transform a wide range of institutions and systems.

Viewed in this way, university ranking technologies can be seen as social and political projects starting in a specific spatial location, building rapidly through endogenous processes (such as being incorporated into university branding and advertising; generating competing ranking systems; becoming part of a legitimating discourse on accountability; entering explanatory discourses, as in those outlined below; generating new revenue streams for selected actors, such as the publishing firms) so that they spread out though space and time to affect social relations in other locations, in turn transforming both the contexts from which it began, and the environments into which it enters.

3. **Locating and Interpreting Analyses and Explanations of World Rankings**

Rankings are discrete social and political projects. Rankings (world rankings, bibliometrics, national rankings, hot papers, and so on) are also a clustering or ensemble of projects with a programmatic dimension; a set of technologies (benchmarking, ranking, barometers etc) aimed at using systems of quantification and stratification to generate changes in the objects and subjects of the sector. Arguably, the rapid spread of rankings around the globe over the past decade, advanced by a range of private and public actors, is simultaneously the object and outcome of projects passing through, disturbing, and transforming the higher education sector in visible, and yet to be made more visible, ways. We have therefore

categorised the dominant focus of analysis and explanation of rankings as falling into 1 of three categories; as a discrete social and political project, as part of wider programme of social change, or as registering important changes taking place within wider social formations.

3.1   Projects

The category 'project' refers to a (social/political/cultural) focus on a discrete strategy (such as a policy) advanced by particular actors (such as a Ministry of Education, a university) to effect social change.   A project is at once discursive and material; ideational and representational. Projects are promoted, read, interpreted, and enacted, by key actors in the field, though we can differentiate between those who advance the project because of their role in policymaking and in implementation, and those whose roles are to explain, such as academic researchers, researchers in think-tanks, the research divisions of national and international agencies, and so on.

Explanations that focus on rankings of world universities at the level of a 'project' tend to view them as the outcome of discrete policy instruments to understand and generate changes in governance practices in universities, such as responding to the need for accountability and transparency (as proxies for quality in New Public Management). Typical examples of this work are that of the Canadian-based policy consultants – Alex Usher and Massimo Savino (2006; 2007), and well-known World Bank higher education analyst, Jamil Salmi and collaborator Alenoush Saroyan (2007). Both pairs of writers are leading commentators on university world rankings. They also straddle the world of private consulting firms, international agencies, universities and academic production.

For Usher and Savino (2007: 5), international ranking schemes have a quality assurance role for they provide transparent information to the public. Similarly, Salmi and Saroyan argue universities have "…traditionally enjoyed considerable autonomy and are now being challenged to become more accountable for their performance and the use of public resources" (2007: 32). In their view, demands for accountability have come "...from students as well as other stakeholders, such as governments, wary of rising costs, employers

in need of competent graduates, and the public at large eager for information about the quality of education and labour market prospects" (Ibid: 32).

Institutional rankings by league tables are offered as one example in a wider array of accountability instruments which have emerged to assess and govern university life (for example, accreditation, cyclical reviews, external evaluation by peers, inspection, audits, benchmarking and research assessments). The ARWU and *Times Higher Education* rankings are identified as 2 amongst more than 30 variably known ranking systems – all with rather different scales of reach and scope.

Whilst acknowledging that the systematic use of league tables, as a widespread phenomenon, has a history of less than a decade, wider concerns over their rise and presence are seemingly allayed by the argument that rankings have a long history in the USA, beginning in the 1870s (Salmi and Saroyan, 2007: 35). What makes the current period different, they suggest, are changes in the sector itself: the massification of higher education; unprecedented increase in enrolments; the expansion of the sector with new private, for-profit providers; and the internationalisation of tertiary education. These developments within the sector, they argue, have caused stakeholders to demand greater accountability, transparency and efficiency, giving rise to new incentives for "quantifying quality" (Salmi and Saroyan, 2007: 35). One question here, however, is who are the stakeholders, and how have academics been consulted in what amounts to a fundamental shift in gravity in the global governance of their work.

Mindful of the widespread (positive and negative) reaction to these league tables, Usher and Savino, and Salmi and Saroyan, all focus on the need for better practices in the collection of data to ensure accuracy, relevance, and usefulness (quality), and therefore greater quality and accountability. Salmi and Saroyan ask: "Are they totally inappropriate measures of quality in tertiary education that should be discarded all together? Can they be adapted to become relevant to the information needs of developing countries? Do they have any beneficial use for public policy, accountability and consumer information purposes? Is the ranking exercise a fair game with unbiased rules?" (2007: 33).

However, these questions and answers view the rankings project and issues of quality in apolitical terms; as a technical cum methodological challenge that can be fixed with sufficient discussion, methodological innovation, and best practice sharing, rather than a political one to be discussed, debated, challenged and perhaps rejected. The purpose of their analysis is to ensure the project generates better quality data to ensure institutional accountability. This technical framing closes off the possibility of asking a range of questions: such as the biases that are inevitably involved in framing university work in this way; the potential damage that can be caused to university produced knowledge as a result of reducing complex institutional activity into seductively simple measures; the nature, scale and temporal horizons of the different rankings projects (every year for the ARWU and *Times Higher Education*); and the wider commercial interests of some of the actors who might be involved. Yet this technical/methodological perspective has become so dominant that it has led to the creation of the International Ranking Expert Group (IREG) in 2002 and the associated IREG-International Observatory on Academic Ranking and Excellence (a not-for profit association) in 2009. As Salmi noted (with World Bank colleague Roberta Malee Bassett) on The Times Higher Education website (Salmi and Bassett, 2009):

> It is imperative that those who produce the rankings continue to create and refine user-friendly mechanisms for reliable comparisons across institutions and systems. And, equally, it falls on the shoulders of consumers of rankings to question and examine the information being presented to them. Hopefully, expanded critical examinations of the methodology and interpretation of rankings by academics, consumers and policymakers will contribute to their continual improvement as information and guidance instruments for their numerous stakeholders, as has been seen in their brief history thus far. This is good news for both the producers and the consumers of league tables.

3.2   Programmes

A second category of explanations regarding global university rankings is at the level of what we refer to as 'programme'. Explanations of this kind focus attention on a clustering of projects under a broad discursive framing, for instance the idea of 'global competitiveness' or a 'quality higher education sector', which are being advanced to effect broader social and political changes.

The work of Ellen Hazelkorn (2009, 2011) is illustrative here. Her starting point is to highlight the limitations of the 'technical' explanations offered to understand ranking as a 'project' and which we highlighted above. As she remarks; analyses and explanations that focus primarily on transparency and accountability "…do not fully explain the almost instantaneous and universal endorsement and obsession" with the Shanghai Jiao Tong and Higher Education initiatives that were respectively launched in 2003 and 2004. Whilst observing that rankings "…appear to order global knowledge and give a plausible explanation for a framework through which the global economy and national (and supranational) positioning can be understood", the main focus for her analysis and explanation is on rankings as one amongst a number of policy instruments and management tools aimed at transforming universities into;

> …strategic corporations, engaged in positional competition, balanced fragilely between their current and preferred rank. By appearing to strengthen or grant visibility to some institutions, rankings have also exposed perceived weaknesses at the system and institutional level. To succeed, or even just survive requires significant changes in the ways that HEIs conduct their affairs (Hazelkorn, 2009: 4).

In other words, rankings are both mechanisms and instruments for deeper social change within the higher education sector. Hazelkorn considers the range and extent of the transformations within higher education to be the result of processes of globalisation, marketization and accelerated competitiveness, leading them to becoming "…more strategic, identifying research strengths and niche competencies, reviewing resource allocation, recruiting international scholars and adapting the curriculum" (Hazelkorn, 2009: 13). In her account, quality is both a political and strategic term in that it is used as a mechanisms of governing.

Hazelkorn identifies six ways in which rankings influence and reshape higher education institutions: (i) student choice – competitive post graduates in particular seek highly ranked universities; (ii) strategic thinking and planning – particularly the selective choice of indicators for management purposes; (iii) the reorganisation and restructuring of higher education institutions to enable them to respond to, or take advantage of, rankings; (iv) reshaping priorities – such as focusing on research, changing the curriculum attracting

international students, harmonising programmes; (v) academic profession – used to identify (and recruit) the best performers; and (vi) stakeholders – such as alumni, who view rankings as a proxy for the return on their investment in the institution. However, she also provides evidence to show that different countries respond to rankings in different ways. For instance, Germany has used rankings to help better define targets and promote a more distinctive profile (Hazelkorn, 2009: 10). Australia, on the other hand, with a very strong export market in education services, uses rankings as part of its export machinery and branding to attract international students. Both Denmark and Finland has used the rankings to frame and legitimize the merger of several of its higher education institutions, whilst Japan has promoted the idea of a highly ranked university to generate internal changes within Japanese universities, including greater internationalization, and the development of more competitive research by developing centres of excellence (Ibid: 12).

It is worth noting that Hazelkorn's intensive research into this topic is heavily supported by the OECD's Programme on Institutional Management in Higher Education, reflecting the OECD's awareness of the relevance of the programmatic frame to assessing and guiding institutional transformation *vis a vis* public policy. And while Hazelkorn acknowledges a link between the different projects and the wider context when she refers to university rankings as contributing to "…measures of international competitiveness and national economic strength" (p. 14), she stops short of considering the way in which rankings might be entry points for, artefacts of, and engines for, the reconstitution of the sector as an economic market described by Polanyi (1992) as 'economic institutedness'. In other words, markets—such as the emerging higher education market—instituted, or produced, through social institutions, and legal and political strategies. In the following section we will argue that rankings are a powerful new arts of governing; they are involved in producing a higher-education market as well as creating opportunities in value creation for newer actors in the sector.

3.3   Social Formations

This leads us to our third category of explanations about university world rankings that focus on more fundamental transformations taking place in the production, circulation and use of knowledges in societies, and the co-constitutive role of the university in this process. Two

rather different contributions will be considered here. One is from Simon Marginson (2008) and his analysis of rankings as social and political projects that are also key features of the emerging knowledge economy (Marginson prefers to use the word k-economy). The second draws on one of own works (Olds, 2010; 2012), and the way university rankings have become entry points for new commercial actors and the insertion of their interests into the sector as the means for generating new revenue streams, and the basis for an advanced services economy, into which higher education is being drawn.

Australian academic, Simon Marginson has generated a huge body of work (via interviews, journal articles, commissioned reports) on the transformations of universities as a result of economic restructuring more generally, and the role of global rankings of universities in particular. As a globally-cited academic and well regarded public intellectual, as well as consultant to the OECD, he also plays a key role in circulating discourses on global rankings, in particular explanatory discourses. His explanatory works are thus scattered across the projects and programmes categories we have outlined above. However his explanations that engage with the knowledge-economy (or what he refers to as the k-economy) and its relationship to global rankings most interests us here (see Marginson, 2008). Marginson uses his paper to reflect on, and explain, the reason for the emergence of a range of outcomes measures in research and other areas, global rankings, and institutional classifications of higher education (p. 3). Marginson's fundamental argument is that rankings are constituent technologies for assigning value to knowledge goods and flows in what he calls a new political economy of knowledge based upon transformations in the nature of knowledge production itself within the academy (open source and commercial markets), and the 'global knowledge status system' which has emerged to give direction to, and differentiate, or stratify, different knowledge flows (p. 3).

Why rankings now, given that universities have for a long time depended upon reputation? The answer for Marginson is that we live in a global *knowledge* economy; one that is growing rapidly as a result of an expansion in the number and range of knowledge goods and knowledge-intensive services. And while Marginson argues potentially available knowledge is often controlled by some human agents at the expense of others, as the "…the means of knowledge creation are pulled gravitationally into strong centres that secure a

superior capacity for creation and dissemination, and are able to claim formal authority in the k-economy" (Marginson, 2008: 7), his focus on the status side of the *status-economy* pairing (rankings), or the new reputational systems that are being constructed. This is clearly important, but it tends to overlook the transformation of the sector as both an object of governing by commercial actors, and an outcome of that governing. We will argue here that these represent the re-sectoralisation of higher education, and a transformation of higher education within the context of the wider economy (see also Robertson, 2011).

Like Hazelkorn above, we argue the need to pose the question: Why do we care so much about the actual and potential uses of bibliometrics and world university ranking methodologies, and focus so little on the private sector firms (such as Elsevier - producer of Scopus; Thomson Reuters - producer of the ISI Web of Knowledge; Google - producer of Google Scholar), and their inter-firm relations, and they ways in which their respective and collective projects driving bibliometrics and global rankings (see Olds, 2010: 1). The point is that there is a disjuncture between the volume of research conducted on bibliometrics versus research on these firms (the bibliometricians), and how these technologies are brought to life and to market. For example, a search of Thomson Reuter's ISI Web of Knowledge for terms like Scopus, Thomson Reuters, Web of Science and bibliometrics generates a nearly endless list of articles comparing the main data-bases, the innovations associated with them, but amazingly little research on Elsevier or Thomson Reuters (that is, the firms).

Yet, the role of firms, such as Elsevier and Thomson Reuters, not to mention QS Quacquarelli Symonds Ltd, and TSL Education Ltd, in fueling the global rankings phenomenon, has received remarkably little attention in contrast to vigorous debates about methodologies. For example, the four main global ranking schemes, past and present (the Shanghai Jiao Tong University's Academic Ranking of World Universities (2003 -); the Times Higher Education/QS World University Rankings (2004-2009); Times Higher Education/Thomson Reuters World University Rankings (2010-); QS World University Rankings (2010 -), all draw from the databases provided by Thomson Reuters and Elsevier.

One of the interesting aspects of the involvement of these firms with the rankings phenomenon is that they have helped to create a normalized expectation that rankings happen once per year, even though there is no clear (and certainly not stated) logic for such a frequency. From a firm perspective, the annual cycle arguably needs to become normalized for it is a mechanism to extract freely-provided data out of universities. This data is clearly used to rank but is also used to feed into the development of ancillary services and benchmarking capabilities that can be sold back to universities, funding councils, foundations, regional organizations (e.g., the European Commission which is intensely involved in benchmarking and now bankrolling a European ranking scheme), and the like. QS Quacquarelli Symonds Ltd, for example, was marketing such services at their stand at the 2010 NAFSA conference in Kansas City, while Thomson Reuters has been busy developing the Global Institutional Profiles Project which was launched in 2009. According to Thompson Reuters (2012) "The Profiles Project will create data-driven portraits of globally significant institutions, combining reputational assessment, scholarly outputs, funding levels, faculty characteristics and much more in one comprehensive data-base".

The Global Institutional Profiles Project is being spearheaded by Jonathon Adams, a former Leeds University staff member who established a private firm (Evidence Ltd) in the early 1990s that rode the UK's Research Assessment Excellence (RAE) and European Research Area waves before being acquired by Thomson Reuters in January 2009. Sophisticated on-line data entry portals are also being created. These portals build a free-flow (at least one one-way) pipeline between the administrative offices of thousands of universities around the world, Thompson Reuters who specialise in strategic oversight of the stages of data gathering and delivery (Stage 1 - Opinion Survey; Stage 2 - Reputational Survey; Stage 3 - Institutional Data Collection, Stage 4 - Data Validation, Stage 5 - Data Delivery), to other firms who run the on-line survey tools, and still other firms who then do the ranking. These Institutional Profiles that are being marketed derive their data form a combination of citation metrics from Web of KnowledgeSM, biographical information provided by institutions, and reputational data collected by Thompson Reuters Academic Reputation Survey, all of which come to the firm via the Times Higher Education World University Rankings (powered by Thompson Reuters). That Thompson Reuters have a clear sense of

itself as a trader in intellectual property is clear from their recent announcement regarding Institutional Profiles in April 2012: "The Intellectual Property and Science business Thompson Reuters today announced the availability of 138 percent more performance indicators and nearly 20 percent more university data within Institutional Profiles^{TM} , the company's on-line online resource covering more than 500 of the world's leading academic research institutions" (Thompson Reuters, 2012: 1).

As the firms expand their range of data on institutions, it also places greater and greater demands in universities. Put another way, data demands are also becoming very resource consuming for universities. For example, in 2010, the QS template being dealt with by universities around the world shows 14 main categories with sub-categories for each. Together, there are 60 data fields, of which 10 are critical to the QS ranking exercise. Path dependency dynamics clearly exist for once the pipelines are laid the complexity of data requests can then be gradually ramped up, as we see with Thompson Reuters. A key objective, then, seems to involve using annual global rankings to update fee-generating databases, not to mention boost intra-firm knowledge bases and capabilities (for consultancies), all operational at the global scale.

These kinds of developments suggest that there are major changes taking place within the wider political economy, of which higher education is increasingly a part. These changes, and explanations of such changes, also raise fundamental questions around the governance of higher education, the relationship between knowledge and democracy, and how these emerging developments should and could be regulated.

4. From 'Explanations' to 'Effects'

Why, and how, have global rankings managed to have the effects that they do deep inside national territories? Knorr Cetina (2005) argues that idea of the network does not capture the totality of what is at play, including the significance of heightened moments of reflexivity when multiple forms of information are presented simultaneously, aggregated, articulated and projected, and in doing so, give it new meaning. She refers to these

processes as 'scopic systems'; that is, '…ways of seeing the global that tends toward a single collective' (Sobe et al. 2009, p. 58).

Sobe and Ortegon (2009) make use of this idea to think of ways in which education, historically and in the present, have been projected globally, as well as projecting globality. They point to International Expositions and World Fairs held in the late 19th Century as an example of the ways in which objects were placed together, classified, and then evaluated against a notion of an unfolding future which was given forward momentum by assumptions of progress and modernity. In this very moment, the world is presented as a singular world (Sobe and Ortegon, 2009, p. 61).

Similarly, today there are a burgeoning array of 'scopic systems' that gather together, place in hierarchies, and project globally, or a singular education world—from the OECD's Programme in International Student Assessment (PISA), or their Teaching and Learning International Survey (TALIS), to global university rankings (Shanghai Jiao Tong, Times Higher, U-Multi-Rank), the World Bank's Knowledge Assessment Methodology (KAM) (Robertson 2009), and the recently launched SABER system to assess and rank teacher performance globally (Robertson, 2011). What is significant about these scopic systems, argues Knorr Cetina (2005: 122-123), is "…the extent to which they function like an array of crystals that collects and focuses light on *one* surface. When such a mechanism is in place, coordination and activities respond to the projected reality to which the participants become oriented. The system acts as a centring and mediating device through" (emphasis added). In doing so we can see that despite arguing that rankings have the capacity to represent complexity, they are actually taking *fragments* (or *partial* understandings) of knowledge about complex education processes, whilst presenting them as a *fractal* (a smaller versions of a whole). In doing so, the complexity and diversity of education systems, and their need for diverse policies to diverse issues, also disappears. Fractals (as disguised fragments) act as a proxy, shorthand, and lever for education policy problems and their solutions. Their power as levers of policy reside in their capacity to project a *singular* solution to an imagined system problem (competition, efficiency, world class, quality), and in doing so, invite observers into reacting to the features of the reflected, represented reality rather than to the embodied, pre-reflexive occurrences (Knorr Cetina, 2005: 123).

Scopic systems in higher education are also forms of power in that they simultaneously *frame* education problems, offer a *desired* re/solution, project *outward* with considerable spatial extension, reinforce new social practices over time because of further rounds of data gathering and projection, and tap into *emotions* (shame, pride) that change behaviour – deep inside national territorial states and institutions (Robertson 2012).

However, whilst Knorr Cetina tends to focus on scopic systems that are flat or non-hierarchical in nature, I argue that global university rankings are hierarchical in character, and that positionality and competitive comparison are also at work. It acts to gather up a lifeworld—as one (institution/country/region) to whom a status is assigned in relation to others - whilst simultaneously projecting it forward. There are at least four ways in which this competitive comparison works.

First, as a powerful *spatial* framer and lever for allocating status; it pitches one discipline/institution/country/region against another in terms of a global hierarchical ordering of performers and underperformers. Second, it works in particularly powerful ways when there is a strong *temporal* dimension to comparison, such as ongoing cycles of data collection and where the new reporting deadlines are always on the close horizon of the actors. This provides space for learning to improve, to do better the next time, and the time after (or not) whilst keeping sufficient tension and alertness within the system. Third, an evaluative/moral/emotional dynamic provides the basis of judging where an institution, region or discipline is placed in relation to others. Those actors whose life-worlds it enters are to learn from this evaluative/emotional/affective element; about how to strive to act in ways that are specified by this framing of the world class institution, and avoid disgrace and dishonour. Finally, the capacity for the technology to extend across scales—from the global to the regional and local, in turn produces significant opportunity for its amplification, and therefore power, because of breadth and reach.

5. By Way of Conclusion: On the New Arts of Governing (Quality)

In conclusion, we want to make four observations on university rankings, their globalisation, the nature of social change and the changing basis for authorising and circulating the kind of

academic knowledge which arises from our brief discussions above. The first is that there are a range of analyses and explanations on offer as to the emergence, significance, and effects of rankings on universities as an institution, on academic knowledge production, and on the higher education sector itself. Some analyses have offered us accounts that view rankings as powerful tools for accountability and ensuring quality, whilst others have suggested that they are the visible signals of major transformations under way in the sector. The issue here, of course, is that these are not competing accounts, but partial accounts. However, missing in many of these partial accounts is one that places many of the players driving the process on centre stage, with their interests in full view. This is important if we are to fully take into account what is occurring, and why. This means placing the agents of change, and the contexts for their action - the sector, squarely into the frame, and not just their technologies. Here we also point to the role that universities themselves play in enabling rankings to not only continue, but expand in ambition and depth. And whilst in a submission to the House of Lords European Union Committee report on The Modernisation of Higher Education in Europe, the so called Russell Group (that is, the research intensive universities) recently argued; "…ranking universities is fraught with difficulties and we have many concerns about the accuracy of any ranking. It is very difficult to capture fully in numerical terms the performance of universities and their contribution to knowledge, to the world economy and to society" (House of Lords European Union Committee, 2012: 24-25), at the same time, these same universities continue to supply data at considerable cost to themselves, and no cost to the collecting, collating and rankings firms. It also means developing a more nuanced and theorised account of new modalities of power and control of rankings as a governmental art, particularly around the dual arts of quantification and competitive comparison.   Quantification, as Crosby points out, effected a dramatic change in the modern world both in how it represented reality, and used these simplifications of reality to govern. "It possesses a sort of independence from you. It can do for you what verbal representation rarely does: contradict your fondest wishes and elbow you on to more efficacious speculation" (Crosby 1997: 229). The idea of scopic systems enables us to see the ways in which this process of simplying reality also enables particular representations of the university to travel considerable distance against the frictions of everyday contexts.

Competitive comparison adds a string in the trail of this quantifying practice, as it draws its subjects of governing into their own self-government.

Second, in relation to questions of how the rankings programme of projects has managed to have effects at the level of the social formation, is that they have both escalated the direction and force of the wave, and acted as a register of this effect. This is much like a Richter Scale which registers the force of the earth's disquiet and its potential disruption. In other words, what gives world rankings visibility and force are the multiple advocates, critics, global production networks and rhythmic flows of projects, all of which ensure rankings pass through and project 'quality' in ways that mediate and mobilise the transformation of higher education institutions.

Third, though Walby's (2003) metaphor of the wave is a powerful way of understanding social change, it needs to be finessed to take account of the less visible ways in which the powerful work (those actors and agents with economic interests in new modes of knowledge production, capture and commerce), and thus how power itself also works. Waves have strong undertows; they are at once both visible movements and unseen currents which flow in directions the unsuspecting cannot yet grasp. The role of analysis and explanation is to reveal these in order to open up debate and critical thinking.

This leads on to our final point; that our explanations of rankings need to also be joined by a closer examination of 'mechanisms' and 'effects'. In other words, what kind of art of governing is this? How is the performative element built into global university rankings as a technology? How do they register the effects they do? Whose values and ways of seeing are being projected and performed? And how are these implicated in instituting a new higher education economy? It is not enough to offer an explanation that involves the consumers of rankings, or those who are being governmentalised in some way. Rather we need to also think through *how* these new governmental arts and architectures work on and through universities' microstructures. We've suggested that viewing rankings as scopic systems, whose capacity and reach are enhanced through positionality, hierarchy and most importantly, the ways in competitive comparison reaches deep into the universities microstructures, offers a forward projection plane for ongoing development and change.

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